## **CLAIMS**

- 1. I claim the invention of a linear thread driven rigid boom vang which will extend or contract two outer arms with clevis ends by a left hand and a right hand thread rod, either by turning a center part with the fixed left and right handed rods into and out corresponding drive nuts fixed in the outer arms or by turning the central part with fixed left hand drive nut on one end and a right hand drive nut on the other end around corresponding handed rods fixed inside two outer arms.
- 2. I further claim the invention of a thread driven boom vang as specified in claim 1 with a combined hand/rope drum consisting of two halves which enclose radial mounted, to the outside V-shaped plates connected to the drum and a semicircular cage with rollers which can move circular around these plates and the drum axis and which keeps a line fed inside the two halves of the drum between the rollers and V-shaped plates in which the line is jammed when the outgoing line is pulled, thus turning the engaged drum around the roller cage which keeps the line fed, griped and prevents it from falling out.
- 3. I also claim the invention of a system of brackets consisting of two base brackets with attached hinges and a toggle being able to adjust the turning axis of a boom vang mast bracket by setting the base brackets further apart on the fixing underground and to fit flush various shapes and seizes of masts and booms or flat and cylindrical surfaces, by two identical base brackets with concave underside which, one turned 180° to fit the other adjust themselfes flush to the fixing underground and which each at least carry one more hinge with one of them turned 180° will also fit the other and which are then connected by a bolt carrying a toggle or arm for mounting equipment.